Utah Citizens Advisory Commission (CAC) on Chemical Weapons Demilitarization
Utah Department of Environmental Quality
168 North 1950 West (Bldg. #2), Room 101
Salt Lake City, Utah 84116
September 21, 2006
6:30 p.m.

| Members Present | Members Absent |
|---|---|
| Deborah Kim, Chair | Dan Bauer |
| John Bennett | Jane Bowman |
| Dennis Downs | Rosemary Holt |
| David Ostler | Sidney Hullinger |
| | Greg Jones |
| | Dennis Rockwell |
| | Beverly White |

**I. Welcome/Minutes – Deborah Kim, Chair**

Ms. Kim called the meeting to order at 6:40 p.m. and welcomed all present. A quorum was not present. Therefore, approval of the July 20, 2006 meeting minutes was suspended.

Ms. Kim welcomed Colonel Frederick Pellissier, the new commander of Deseret Chemical Depot, and members of the Tooele County Emergency Management Team, who will be briefing the CAC on the recent CSEPP exercises.

**II. Follow up Items:**

a. Mustard ton sampling results

Ms. Kim stated that Rosemary Holt, a member of the CAC, recently had questions regarding the mustard ton sampling results. Mr. Ted Ryba, TOCDF Site Project Manager, stated this issue will be discussed in more detail during their presentation later in the meeting.

**III. Deseret Chemical Depot Update – Colonel Fred Pellissier**

Colonel Frederick Pellissier introduced himself as the new commander of the Deseret Chemical Depot (DCD), effective July 27, 2006. Colonel Pellissier has experience with stockpile sites and chemical munitions, including the assignment of commanding the Umatilla Chemical Depot Facility as Lieutenant Colonel. Colonel Pellissier anticipates many challenges, but looks forward to the next two years commanding DCD.

Colonel Pellissier provided the following update: (A copy of the presentation is available with the meeting minutes.)

Mustard Campaign (Sampling): The destruction of the mustard ton containers commenced on August 18, 2006. As of September 18, 2006, approximately 32 mustard ton containers have been destroyed. The sampling operation started on June 8, 2006 and about 10% of the mustard ton containers stockpile has been sampled, and about two-thirds of those sampled have been approved for processing.

CAMDS Closure: The liquid incinerator is currently being dismantled. The metal parts furnace is being used to not only process the metal from the liquid incinerator but also to process closure and secondary waste as it is generated.

Emergency Response: On September 13, 2006, the CSEPP Annual Exercise was conducted. Preliminary results from the graph report indicate that DCD, as well as the surrounding community, can successfully respond to a chemical incident and ensure the safety of the workforce and the community.

Environmental: The annual DEQ inspection is currently being conducted. It is anticipated that this inspection should be finished some time next week.

CAC members asked how many of the ton containers have heels in them that preclude disposition by the normal incineration process. Members also asked if any projections can be made based on what has been sampled so far. Colonel Pellissier stated that a good number of low heel tons have been identified. However, the procedures for determining the heel depths has had to be revised. Therefore, the ton containers will have to be re-checked. The heels that were initially determined to be low heels, in fact, have greater heels then originally projected.

CAC members asked if solidification was contributing to the problem. Colonel Pellissier stated that some of the heels have been adhering to the sides of the ton containers, rather than going top dead center where the sample is being taken.

## IV. Chemical Disposal Program Update – Ted Ryba, TOCDF Site Project Manager

Mr. Ryba provided an update on the Chemical Disposal Program. (A copy of the presentation is available with the meeting minutes.)

**Aberdeen Chemical Agent Disposal Facility – (ABCDF) – Maryland**
Closure operations continue with all mustard bulk containers (1,817) drained and neutralized. On Sept.11, 2006, workers began demolishing the Ton Container Cleanout (TCC) building after verification that agent vapor levels were safe. Following TCC demolition expected in a few months, the Process Neutralization Building (PNB) will be cleaned, tested and demolished. Decontamination of the PNB is almost 70 percent complete. The Army expects to complete all closure field work at ABCDF by summer 2007.

**Anniston Chemical Agent Disposal Facility (ANCDF) – Alabama**
The GB agent campaign has been completed. Workers began VX operations on July 23, 2006. As of Sept. 17, 2006, 481 tons has been disposed, totaling 21.4 percent of the Anniston stockpile destroyed, including 7,664 VX M55 rockets. The Metal Parts Furnace (MPF) is currently down to facilitate scheduled maintenance. Secondary waste processing will resume after completion of the MPF maintenance period. ANCDF plans to begin shipping GB secondary 3X waste for offsite disposal on or about Sept. 21, 2006.

**Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP)– Kentucky**
Preparations are underway for a ground-breaking ceremony scheduled for Oct. 28, 2006. In 2007, plant design will be finalized and construction continues for the main destruction facility. At Blue Grass, the Department of Defense (DoD) selected neutralization followed by supercritical water oxidation for use at the depot. The DoD decision was based on technical and environmental studies and input from the community. The plant will destroy a stockpile of chemical weapons containing 523 tons of mustard and nerve agents.

**Newport Chemical Agent Disposal Facility – (NECDF) - Indiana**
In July, workers completed destruction of the VX processing plant that once produced more than 4,400 tons of VX. The demolition project was a year ahead of schedule and without incident and helps meet treaty obligations. The Centers for Disease Control has issued its report about safe transportation of VX hydrolysate to the DuPont facility in New Jersey. A decision whether to ship the hydrolysate is still pending. As of Sept. 17, 2006, 433 bulk VX containers have been neutralized, totaling 25.7 percent of the entire stockpile.

**Pine Bluff Chemical Agent Disposal Facility – (PBCDF) - Arkansas**
M55 GB rockets continue to be processed. As of Sept. 17, 2006, 304 tons of GB agent have been destroyed.

**Pueblo Chemical Agent Destruction Pilot Plant (PCAPP) – Colorado**
Stage one construction continues with perimeter fencing and the Defense Access Road completed. Construction of the Access Control Point continues and is scheduled for completion by spring 2007. Stage two construction of ancillary buildings is expected to begin in FY07. The Defense Acquisition Board met on Aug. 22, 2006. The decision on how to treat hydrolysate from the neutralization process either on or off-site is expected by the first of next year. Funding is still pending in Congress for the long term project funding cycle.

**Umatilla Chemical Agent Disposal Facility – (UMCDF) – Oregon**
The entire stockpile of M55 GB rockets and warheads at Umatilla has now been destroyed. Workers also completed disposal of all GB bombs at UMCDF, the last GB bombs in the U.S. stockpile. Workers are now in "changeover" from bombs to prepare for the eight- inch projectile campaign expected to begin in October 2006. As of Sept. 17, 2006, 756 tons of GB agent have been destroyed, totaling 20.4 percent of the entire stockpile.

The Chemical Disposal Program Update included a graph dated September 17, 2006 entitled "Percentage of CMA Total Agent Stockpile Destroyed." Total stockpile 31,498 tons; Total destroyed 12,632 tons (40.1%); Total remaining 18,865 tons (59.9%).

Mr. Downs asked if a future meeting could include information or a presentation regarding ultimate use of other stockpile sites around the nation. Mr. Dows stated that the DCD facility is moving toward closure and there has been discussion and speculation about the ultimate use of the facility after closure. It would be valuable to know the status of the other stockpile sites and if there has been any determination made on the ultimate use of those sites. Mr. Ryba stated that this type of information can be provided at a future meeting.

**V. Plant Status – Mr. Gary McCloskey, General Manager**

Mr. McCloskey presented the TOCDF Update on Safety Performance and Environmental Performance. (A copy of the presentation is available with the meeting minutes.)

Graphs entitled "Estimated Recordable Injury Rate (RIR) (12-Month Rolling Average)" and "Recordable and Total Injuries by Month" provided the following information:

Safety: goal of <=1.0 RIR, 12-month recordable OSHA injury rate is at 1.63. (Part of this figure takes into account a food poisoning incident (celebration luncheon), which counts as OSHA recordable injuries.) As of September 17, 2006, TOCDF has worked 1,672,650 hours or 327 days without a lost day injury. As of September 17, 2006, TOCDF has worked 45 days without a recordable injury. The last recordable injury was on August 3, 2006. As of September 17, 2006, TOCDF has worked 11 days without a first aid injury. A first aid injury occurred on September 6, 2006. (Only one OSHA recordable injury has occurred in the last three months.)

Graphs entitled "RCRA Human Error Non-Compliances 12 month rolling average) and Human Error Title V Deviations (12 month rolling average) provided the following information:

The RCRA Human Error Non-Compliance 12-month rolling average decreased from 1.33 since the last CAC meeting in June to 1.17 for August. So far, for the month of September, there has been one RCRA human error non-compliance. (It was clarified that the Title V permit referred to in this graph is an Air Quality permit, which is a separate permit than the one issued by the Division of Solid and Hazardous Waste. DCD has more than one environmental permit from the various agencies within DEQ.

Area 10 HD Sampling Status and Performance and a graph entitled "Classification of Sampled Mustard Ton Containers" provided the following information:

TOCDF commenced mustard-filled ton container demilitarization operations on August 18, 2006. As of September 18, 2006, 20 ton containers have been processed through the MPF. Agent samples have been removed from 667 ton containers at the sampling igloos in Area 10. A total of 667 mustard ton containers has been sampled as of September 18, 2006. A pie chart entitled "Classification of Sampled Mustard Ton Containers" breaks down the mercury in six categories. Information collected also indicates that, in the case of mercury, it appears that there is a series of lot numbers that are predominate contributors to the high mercury items. A few of those lots were detected early, so consequently a higher percentage of high mercury ton containers were discovered early than anticipated. The Army has now been able to identify the lots that are low mercury and are now exclusively getting low mercury ton containers. The Army has completed approximately 10% of the mustard stockpile and a contamination in the glove box has not occurred. However, one area of concern is the heel determination issue. As the ton containers are brought to the plant and as the free standing liquid was punched and drained off, it was determined that the heels were actually larger than anticipated. Segments of the heel may adhere to the side of the containers rather than the bottom. Therefore, the way the ton containers are probed has

now been changed to probe in fifteen locations instead of three. The new probing effort being utilized does produce results that are consistent. Re-sampling of many of the lots already sampled will be done to determine the accurate heel depth and all future lots will be sampled utilizing this new technique.

**Baseline HD Ton Container Startup Information included the following:**

Final changeover challenges showed that chlorine vapors were determined to interfere with Mustard ACAMS. The decontamination solution changed from bleach to water/detergent mixture. Engineering Control Level (ECL) ACAMS (used to monitor toxic areas where higher concentrations of agent are expected) required separate calibration from VSL/STEL ACAMS and this was unexpected, since this was not the case during GB/VX. This was discovered as ACAMS baseline was being developed.

TOCDF successfully addressed challenges following the detailed Operational Readiness Review and closure of Category I findings. Baseline HD ton container operations began on August 18, 2006, which was significantly ahead of schedule.

**MPF Performance**

Currently the Army is the shakedown phase of mustard operation, which is occurring in two furnaces, the metal parts furnace and one liquid incinerator. The Shakedown Test Phase started with low temperature monitoring. The Army has completed that phase and is now into the high temperature monitoring phase. At this point, the Army is moving forward and is addressing issues regarding wisps of smoke that occur after a significant cool down time coming out of the discharge airlock. It has been determined that this is a sulfur particulate that is going through some form of processing as it cools. The Army is currently focusing on this issue. Other shakedown test phases include: discharge airlock hold times, dry run (Mini-Burn), final furnace optimization/RATA, performance capability run (ATB/CPT), AMR validation associated with shakedown, and the MPM readiness assessment process. Delays experienced in proceeding through first three shakedown phases include: higher-than-expected heel weights, furnace effectively destroying agent, smoking ton containers modification of furnace zone times/temperatures and potential engineering solutions. The Area 10 heel depth determination process has not successfully predicted expected heel weights, and the Army is revising the process to include additional measurement locations.

**Mercury Process Monitoring**

A graph entitled “AMR Mercury Results” was discussed. Information indicates that the mercury process monitoring demonstrates compliance with AMR and MACT, the efficiency of analysis process continues to improve. The data also supports the relationship of <1ppm Hg in the liquid and low Hg concentrations in the solids.

**MFS SCHEDULE STATUS**

The Mercury Filtration System was anticipated to be available in the December/January timeframe but is six months behind schedule. The issue is the sulfur impregnated charcoal that is being utilized in that system. Accelerated installation of tie-ins, additional carbon testing, and one to three charcoal changes may needed if the charcoal performs as currently anticipated.

The Schedule Recovery Plan includes design in parallel with testing, procurement of long lead raw materials for filter units, accelerated procurements, construction contractor on contract for pre-construction support by 50% milestone, and additional resources for design efforts.

**MFS CARBON TESTING STATUS**

Two tests have been completed at Donau Carbon’s facility (demonstrated greater than 99.995% Hg removal, 2.2%-5.8% Hg capacity.) The second test showed Hg de-absorption, possibly due to varying inlet Hg concentrations.
Additional testing is underway at URS to evaluate mercury adsorption capacity and de-absorption rates.

Ms. Kim asked how the Army ensures that no off- gas vapors come off the charcoal and what happens to the charcoal that has the mercury in it when it is changed out. Mr. McClosky stated that mercury-contaminated charcoal is disposed of at various facilities that accept mercury contaminated items. Ms. Kim asked if it will be stored before it is shipped. Mr. McClosky stated that material will not have an agent contamination issue as with other secondary waste, so it will be shipped out, not stored. Dennis Downs stated that the types of facilities that do accept these types of waste for disposal are hazardous waste landfills, such as Grassy Mountain Landfill operated by Clean Harbors, Inc. in Utah.

## VI. DSHW Update - Martin Gray

Mr. Gray provided information on two compliance enforcement related activities that the Division is currently working on. 1) The Division is currently conducting its annual inspection. This is a comprehensive evaluation inspection that is required by the Environmental Protection Agency. This inspection is done in addition to the oversight/inspections that are done throughout the year at DCD. However, once a year, during a 3-4 week period, this thorough inspection is done. It is anticipated the inspection will be finished next week. 2) A Judicial Consent Decree is currently out for public comment to resolve violations that were found during last year's inspections. Based on the 2005 inspections, a Notice of Violation (NOV) was issued in March 2006. The Judicial Consent Decree will resolve all the violations and will also require the payment of a penalty. More information can be found on the Division's web page. The public comment period ends on October 6, 2006, and after that time, the Solid and Hazardous Waste Control Board will take action to approve or deny the Judicial Consent Decree. Dennis Downs explained that Division staff is typically at DCD most days of the week. The inspection being discussed is a comprehensive evaluation inspection. Non-compliance issues documented throughout the year are typically put into one NOV. This is done so overlapping enforcement actions do not occur.

## VII. New Business

### a. Utah CSEPP 2006 Exercise – Marilyn Candeleria, Deputy Director, Tooele Emergency Management

Ms. Candeleria provided a presentation on Utah's CSEPP 2006 Exercise. (A copy of the presentation is available with the meeting minutes.)

Ms. Candeleria provided the following information on the Deseret CSEPP Community EX2006, "Setting the Pace for Preparedness". The pro-circuit response team included: Military Installations, Federal Government, State Government, Local Government, First Responders, Response Support Teams, Volunteer Organizations, and Business & Industry. The purpose of the CSEPP exercise was to improve standard operating guidelines, test agency plans and identify "holes", demonstrate and assess capabilities, identify training and resource shortfalls, and evaluate overall, "Community" (local/state/federal) response to a simulated chemical accident or incident. Emergency Response outcomes include: Prevention & Preparedness: Actions to prevent, prepare for, or reduce the impact or consequences of an emergency or disaster; Emergency Assessment: Analyzing the hazard and providing predictions, detecting the accident, determining its impact, and classifying the event, making off-post notifications with PARs, and conducting monitoring and sampling operations; Emergency Management: Top-level decision-making; coordination; and direction and control; mobilization of emergency personnel, operation of the EOC, alert and notification of the public providing emergency instructions; CAI Hazard Mitigation: Response tasks on-scene to control, collect, and contain an incident at its source, and limit the magnitude of the hazard's impact; Protection: Protective action decision-making and warning affected populations, carrying out evacuation & sheltering-in-place activities, including: performing traffic and access control, transporting evacuees; opening and operating reception centers/shelters, protecting schools and special populations; Victim Care: Actions relative to treating victims, including decontamination, victim transport, patient treatment at medical facilities, patient tracking, and handling and tracking human remains; Public Information: Providing emergency information to the public-at-risk and the public-at-large, implementing the Joint Information System and activating and operating a Joint Information Center (JIS/JIC); Remediation & Recovery: Activities relating to restoring essential services, businesses and commerce; cleaning up the environment and rendering the affected area safe. Tune-up plans and coordinate with other agencies include: rotate and balance risk assessments and preparedness measures for all hazards response capabilities; torque skills and expertise thru training; test all facets ff emergency response with

innovative and challenging exercise program; and actively involve media and public in emergency education and preparedness activities.

Ms. Candeleria explained the CSEPP exercise scenario: During loading operations, lightning strikes the truck, causing one container to fall to the ground and leak. The lightning strike also sets the truck on fire.I It is unknown if agent is involved. Workers alert DCD EOC of accident and actions are initiated to control and contain the incident at its source. DCD EOC classifies the event and determines appropriate on-post and off-post protective actions. Storage workers continue actions to limit the magnitude of the accident's impact, both on-post and off-post. DCD notifies county of "community level event" and provides protective action recommendation to evacuate zones.

"Community Event" triggers County EOC activation and protective action decision for precautionary evacuation. Traffic control, emergency medical services, fire and hazmat responders are mobilized per planned concept of operations. Clear and concise emergency instructions are quickly prepared for public broadcast. Emergency instructions are broadcast over outdoor and indoor warning systems. Warning system redundancy allows for system failures and provides alternate modes for reaching various audiences. Outdoor warning systems includes: sirens -- activated in silent test mode; highway message boards -- activated specified message boards with "disaster drill in progress"; indoor warning systems--tone alert radios--emergency alert system --activated using the "this is a test..." message only (was not broadcast over commercial television (TV) and radio). The Tooele community joint information center is activated to provide coordinated information dissemination. The CSEPP exercise scenario also included a motor vehicle accident in Rush Valley involving a bus and two-semi-trucks. The Red Cross also participated in the exercise. Also, three different counties within Utah were involved in the exercise. The practice scenario takes approximately eleven months to coordinate.

Ms. Candeleria stated that Tooele County Emergency Managements (TCEMs) goal is to provide a sense of well being to the community. TCEM wants to assure the community that they are taking care of the victims, the public, and are providing everything that they need to get the situation back to normal. Evaluators are present throughout the CSEPP exercise and provide a detailed report that includes evaluating prevention and preparedness, emergency assessment, emergency management, accident site hazard mitigation, protection, victim care, public information, and remediation and recovery. The draft report indicates that TCEM is capable of responding to all the different areas in the exercise. Ms. Candeleria stated that through these exercises, they learn new things, or how to do things better, and evaluate strengths/weaknesses.

Ms. Kim asked when the final detailed report will be available. Ms. Candeleria stated that the final report will be available in November. The draft report is currently available. Ms. Kim requested that a copy of the final report be provided to the CAC at the next meeting.

Two television new clips covering this CSEPP exercise were presented to the CAC.

CAC members thanked Ms. Candeleria for the comprehensive and informative presentation.

**b. CSEPP History Lesson (Video) -**
**Due to time constraints this item was tabled and will be presented at the next meeting.**

**VIII. Citizens Concerns: None to Report**

Due to scheduling conflicts, the next CAC meeting was tentatively scheduled for November 30, 2006, at 6:30 p.m. in the Tooele City Hall, (City Council Room), located at 90 North Main, Tooele, Utah

**IX. Adjourn**
The meeting adjourned at 8:10 p.m.